

REMARKS

Claims 18-33 and 37-41 are pending. Claims 34-36 have been withdrawn. Claims 18-33 have been amended. New claims 37-41 have been added. Support for the new claims and amendments can be found throughout the application as originally filed. No new matter has been added.

Rejection of Claims 18-21 and 24 Under 35 U.S.C. §112, second paragraph

Claims 18-21 and 24 are rejected under 35 U.S.C. §112, second paragraph, "as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention."

In particular, the Examiner asserts that "the phrase 'can be' in claim 18 is unclear." The term "can be" is not recited in claim 18 as amended, thus obviating this rejection.

With regards to claims 19-21, the Examiner asserts that the phrase "PAS" or "Pas" "render the claims vague and indefinite [since] it is unclear ... what is abbreviated by 'Pas'."

Claims 19-21 have been amended to recite "Pascal times a second", thereby obviating this rejection.

The Examiner also rejected claim 24 asserting that "the phrase '85% and 35% in claim 24 is unclear, which renders the claim vague and indefinite. Ranges in the claim language must increase from the smaller number to the larger number."

Applicants respectfully traverse this rejection. First, Applicants note that the claimed range is 85% to 30% by weight, not 35% as stated by the Examiner. Second, Applicants ask that the Examiner point to the authority which states that a range must be claimed from smaller number to larger number. This language is clear especially in view of the fact that the claim recites two components—one which can be present in a range of about 85% to 30% by weight, and the second which can be present from about 15% to about 70% by weight. It is clear that the recited ranges of the components complement each other. Thus, Applicants respectfully request that the Examiner withdraw this rejection.

Rejection of Claims 18-33 Under 35 U.S.C. §103(a)

Claims 18-23, 29, 30 and 33 are rejected under 35 U.S.C. §103(a) as "being unpatentable over Trask (USPN 3,778,251) in view of Burgess et al. (USPN 5,164,240)." In particular, the Examiner asserts that

Trask discloses a shoe stiffner material ... with two layers of polycaprolactone film material for adhesion ... enclosing a pliable polymeric composition impregnated in a fabric layer ... However, Trask fails to disclose apertures in one of the layers with a size between 0.15 mm² to 5 mm² and one of the layers being made from non-woven fabric with apertures.

Burgess et al. teaches an apertured non-woven fabric layer with openings of 0.1 to 0.3 mm² ... and a resin layer ... in a shoe stiffner for the purpose of allowing the thermoplastic resin to flow through the fabric and act as a stiffening agent in the composite.

Applicants respectfully traverse this rejection. The claims, as amended, are directed to a material suitable for use in the manufacture of a shoe stiffner. The material includes a layer of a stiffner composition disposed between two layers of sheet material. The stiffner composition includes a polymeric material which is stiff at ambient temperature and is pliable, adhesive and flowable under pressure at an elevated temperature. In at least some embodiments, at least one of the layers of sheet material has openings in it of a size sufficient to allow the polymeric material to pass through the openings, but the polymeric material does not pass through the openings when the material is at the ambient temperature. In other embodiments, the polymeric material is adhesive and is contained within one or more of the openings of the sheet material. The claimed invention allows manipulation of the shoe stiffner by hand since the heated adhesive is disposed between the two layers and flows through the apertures to adhere the shoe stiffner to the shoe upper.

Applicants note that the claims as amended are not in the form of product-by-process claims, and therefore, the Examiner's statements regarding the interpretation of product-by-process claims are not addressed.

Trask et al. disclose a shoe stiffner which includes a polysterene-impregnated fabric disposed between two sheets of polycaprolactone. Unlike the claimed invention, it is the outer

layers—the polycaprolactone layers disclosed by Trask et al, and not the polysterene-impregnated fabric, which is adhesive. In addition, as pointed out by the Examiner, Trask et al. does not disclose apertures in at least one of the outer layers. Thus, contrary to the Examiner's statements, Trask et al. does not disclose the claimed invention.

Burgess et al. disclose a non-woven composite to be used as a shoe counter. The non-woven composite disclosed by Burgess et al. has one fabric surface which is not thermoplastic resin impregnated and therefore has a velvety surface and a second fabric surface which is impregnated with thermoplastic resin to make the shoe counter stiff. Like Trask et al., there is nothing in the Burgess et al. references which teaches or suggests disposing a composition having adhesive properties between the two surfaces of the non-woven fabric. In fact, Burgess et al. make it clear that if an adhesive is to be used at all on the shoe counter, it is coated on the outside of one of the surfaces of the shoe counter. See, e.g., column 6, lines 45-52.

Thus, neither Trask et al. nor Burgess et al., alone or in combination, teach or suggest the use of a composition having adhesive properties disposed between two layers of sheet material as currently claimed. Even if there was motivation to combine these references, which there is not, one would still not arrive at the claimed invention. Therefore, the claimed invention is not obvious in view of these references.

Claims 24, 27, 28 and 31 are rejected under 35 U.S.C. §103(a) as being “unpatentable over Trask (USPN 3,778,251) in view of Burgess et al. (USPN 5,164,240) as applied to claims 18-23, 29, 30 and 33 above, and further in view of Agger et al. (USPN 5,068,143).” In addition, claims 25 and 26 are rejected as being “unpatentable over Trask (USPN 3,778,251) in view of Burgess et al. (USPN 5,164,240) as applied to claims 18-23, 29, 30 and 33 above, and further in view of Jonnes et al. (USPN 3,660,849).” Lastly, claim 32 is rejected as being “unpatentable over Trask (USPN 3,778,251) in view of Burgess et al. (USPN 5,164,240) as applied to claims 18-23, 29, 30 and 33 above, and further in view of Mobius et al. (USPN 4,388,768).”

As discussed above, neither Trask et al. nor Burgess et al., alone or in combination, teach or suggest the claimed invention. None of the secondary references cited by the Examiner, namely Agger et al., Jonnes et al. or Mobius et al., make up for the deficiencies of Trask et al.

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and Burgess et al. Therefore, the claimed invention is not obvious in view of any of the references cited by the Examiner.